



KING COUNTY  
Department of Natural Resources

# Stormwater Pollution Prevention Plan for the Boeing Staging Facility At the King County Airport



## **Executive Summary**

This Stormwater Pollution Prevention Plan (SWPPP, Plan) was prepared for the King County's Wastewater Treatment Division in accordance with the requirements of the "Washington State Department of Ecology's General Permit to Discharge Stormwater Associated with Industrial Activity."

The Permit requires a "Stormwater Pollution Prevention Plan" at a Transportation Facility where trucks are staged and maintenance is performed. This location is used as an intermediate location between King County's Wastewater Treatment Plants and various delivery sites. The potential pollution source activities are:

- Vehicle/equipment maintenance
- Vehicle/equipment parking
- Vehicle/equipment washing

Best Management Practices (BMPs) designed to prevent or minimize stormwater pollution are described in Section 3 and Appendix A. The need for additional pollution control measures will be evaluated during two required inspections. If added measures appear necessary at that time, additional BMPs will be identified for each observed problem area.

The Pollution Prevention Team is responsible for reviewing the entire Permit and ensuring compliance with all terms and conditions.

**Stormwater Pollution  
Prevention Plan for the  
Boeing Staging Facility  
At the King County Airport**

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## SECTION 1 – INTRODUCTION

### 1-1 Purpose

This Stormwater Pollution Prevention Plan (SWPPP) is intended to comply with Washington State Department of Ecology requirements associated with activities associated with the discharge of stormwater.

### 1-2 Regulatory Overview

A variety of federal, state and county regulations have been released in recent years to address stormwater quality and quality control. The National Pollution Discharge Elimination System (NPDES) stormwater discharge permit regulation, issued by the United States Environmental Protection Agency (US EPA) in 1990 requires that certain municipalities and industries obtain NPDES permits for their stormwater system discharges. King County must comply with the municipal as well as the industrial requirement. The Washington State Department of Ecology is authorized to implement the federal stormwater regulations.

### 1-3 Plan Objectives

The objectives of the SWPPP are:

- To eliminate discharges of unpermitted process wastewater and domestic wastewater to stormwater drainage systems;
- To implement Best Management Practices (BMP's) to identify, reduce, and prevent the pollution of stormwater;
- To prevent violations of surface water quality, groundwater quality and sediment management standards.

### 1-4 Plan Contents

This SWPPP contains the following elements, as specified in the Permit:

- An overview of the Boeing Staging Facility at the King County Airport;
- A detailed map and narrative description of the stormwater drainage system;
- A description of possible sources of pollution at the Boeing Staging Facility;
- A description of existing stormwater management controls and BMPs;
- Forms to be used for documenting the required maintenance and inspections.

### 1-5 Pollution Prevention Team

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Tony Chiras, Dispatch Manager, Great Western Soil Conditioners, (206) 764-3232

1-6 Location

- A. The Boeing Staging Facility is located at the north end of the King County Airport. The address is 6640 Ellis Ave., Seattle, Washington. The site is in an industrial area surrounded by commercial-related activities.

1-7 Overview of Facility Operations

- A. The primary function of the Boeing Staging Facility is to serve as a location to stage trucks that leave the West Point Treatment Plant, a base of operation for dispatch, and a maintenance facility. Industrial activities conducted at the facility include:
- Vehicle/equipment maintenance
  - Vehicle/equipment parking
  - Vehicle/equipment washing

1-8 Stormwater Drainage

- A. Water produced by vehicle maintenance and washing is directed into sewer systems connected to local treatment plants. Vehicle washing occurs in a designated area on the southwest portion of the property, north of building 6640. Most vehicle maintenance is conducted inside the maintenance building.
- B. The Permit requires that each SWPPP contain a site drainage map (see next page). The map must show the following features, if applicable:
- Stormwater drainage and discharge structures
  - Outline of the drainage/catchment areas for each stormwater outfall (including discharges to groundwater)
  - Adjacent surface water bodies
  - Paved areas and buildings
  - Areas associated with the following industrial activities:
    - Loading and unloading of dry bulk materials or liquids
    - Outdoor storage of materials or products
    - Outdoor processing
    - Processes that generate dust and particles
    - Roofs or other surfaces exposed to air emissions from a process area
    - On-site waste treatment, storage, or disposal
    - Vehicle and equipment maintenance and /or cleaning
    - Under ground storage of materials or products

## SECTION 2 – POTENTIAL STORMWATER POLLUTION SOURCES

The SWPPP must include an assessment and description of all activities and significant materials which may potentially be a source of stormwater pollution. The purpose of this assessment is to identify any known or potential pollutant sources which require monitoring. The following is a list of activities and materials occur at the Boeing Staging Facility.

### 2-1 Vehicle Maintenance

- A. This activity includes maintenance work such as lubrication, belt replacement, and the changing of oil and hydraulic fluid in trucks. The majority of the maintenance work is conducted inside the maintenance building. However, some vehicle maintenance is conducted outside. Oils and lubricants are stored inside the building in approved containers. The potential pollutants associated with these activities are oil, grease and petroleum hydrocarbons.

### 2-2 Vehicle Parking and Storage

- A. Vehicles are parked on site. Most of the areas designated for parking are paved but uncovered. Oil, grease and petroleum hydrocarbons are the potential pollutants typically associated with leaking equipment.

### 2-3 Vehicle/Equipment Washing

- A. Trucks are washed at a designated area near the building. Typical pollutants associated with vehicle washing are oil, grease, petroleum hydrocarbons, and sediment.

### 2-4 Material Inventory

- A. The following is a list of materials handled, treated, stored or disposed of at the Boeing Staging Facility that may potentially be exposed to precipitation or runoff. No leaks of pollutants are known to have occurred since November 18, 1989. The majority of vehicle maintenance is conducted inside the maintenance building, and no significant materials are stored outside the building. The materials handled and stored at the facility are:

- motor oil
- transmission / rear end oil
- hydraulic oil
- antifreeze
- lube grease

## SECTION 3 – BEST MANAGEMENT PRACTICES

This section of the SWPPP discusses the BMPs that will be implemented to eliminate or control the potential stormwater pollution sources discussed in Section 2.

### 3-1 Good Housekeeping

- A. Good housekeeping practices are intended to maintain potential pollution source areas in a clean and orderly condition. Good housekeeping practices include such things as regular sweeping and adequate placement of waste containers. Good housekeeping BMPs are described in Appendix A.

### 3-2 Preventive Maintenance

- A. Preventive maintenance practices include inspection and maintenance of the stormwater conveyance system and building drains. Preventive maintenance BMPs are described in Appendix A.

### 3-3 Spill Prevention and Response

- A. Spill prevention and response BMPs are described in Appendix A.

### 3-4 Employee Training

- A. Employee training is a prerequisite for effective management of stormwater pollution. The Pollution Prevention Team is responsible for ensuring that any staff or contractors working at the facility understand the components of the Plan, how it will be implemented and their role in contributing to the effectiveness of the stormwater control measures. SWPPP training will be conducted at least annually and documented on the form provided in Appendix B.

### 3-5 Inspections and Record-Keeping

- A. The Permit requires the following minimum visual inspections of the facility:

- One annual dry-season inspection (May 1-September 30)
- One annual wet-season inspection (October 1-April 30)

These inspections are required to identify evidence of, or the potential for, pollutants entering the storm drainage system. The annual dry season inspection is performed to determine if unpermitted non-stormwater discharges are present and if so, to identify the source of the discharge. The annual wet season inspection must include a verification of the potential pollutant sources and site map, verification of the implementation of the BMPs, and observations as to whether floating materials,

suspended solids, oil and grease, etc. is occurring in the stormwater discharge. The inspections must be performed by a member of the Pollution Prevention Team or an employee knowledgeable of the Plan components and record-keeping requirements. Forms for the inspections are provided in Appendix B. The SWPPP will be revised as necessary to reflect the findings of these inspections.



## **APPENDIX A – BEST MANAGEMENT PRACTICES**

## PERFORM ANNUAL PLAN EVALUATION

**Potential Pollutant Source:**

Failure to monitor the performance and effectiveness of the Plan in reducing storm water pollution could result in inappropriate use of BMPs, inefficient use of pollution prevention resources, and a decrease in the effectiveness of the pollution prevention effort.

**Description of BMP:**

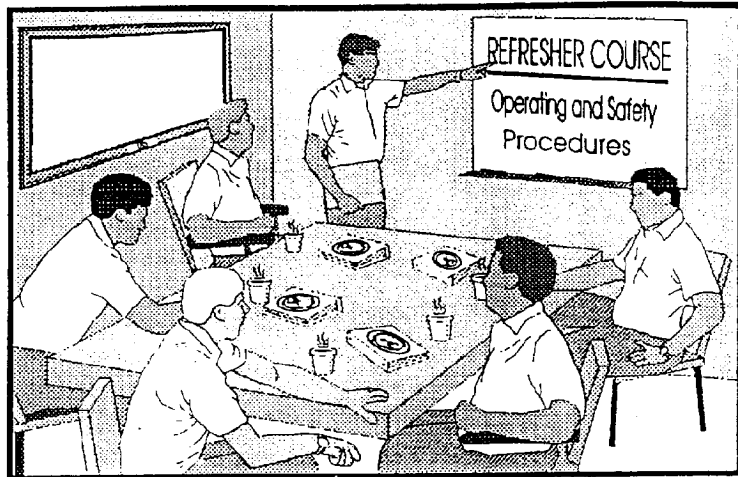
The annual Plan evaluation will:

- Be performed at the time of the wet-season inspection
- Verify that BMPs have been implemented and are being maintained according to the implementation schedule
- Qualitatively assess BMP effectiveness
- Determine if improvements or additional control measures are needed
- Update Plan elements as needed
  - Drainage description and maps
  - Potential pollutant source description
  - Revision or addition of BMPs
- Review training program and spill response procedures

The annual plan evaluation will be documented on the report form included in Appendix E. The report will be maintained with the Plan.

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**CONDUCT  
REFRESHER  
COURSES IN  
OPERATING AND  
SAFETY  
PROCEDURES**

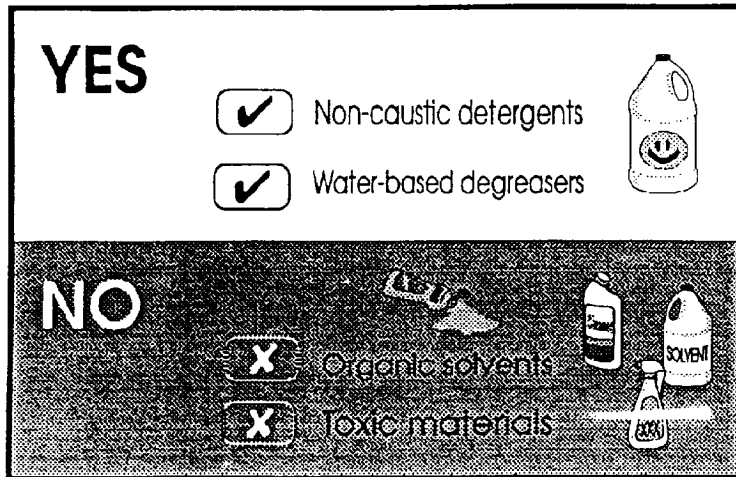


**Potential Pollutant  
Source:**

Over time, personnel may forget correct operating and safety procedures, which may result in storm water pollution. Also, personnel need to be informed of new procedures and policies regarding equipment operation.

**Description of BMP:**

Personnel will be required to have training and refresher courses in operating and safety procedures. This will help to reduce spills and accidents caused by negligence. Training and refresher courses will be conducted semi-annually.

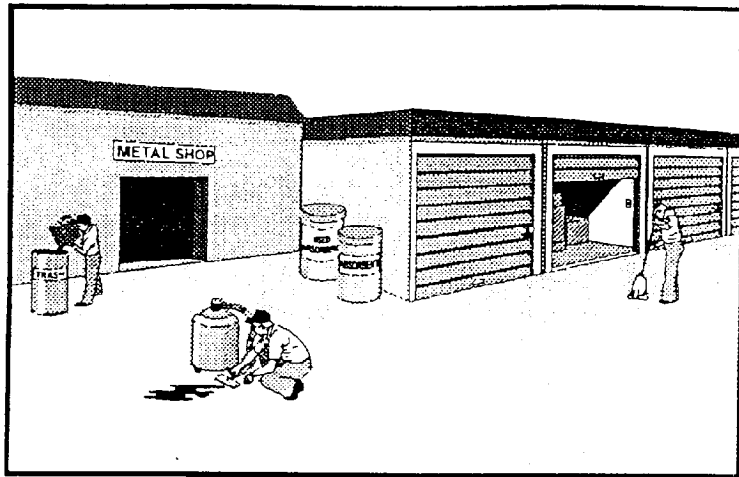
**SUBSTITUTE  
NON-TOXIC OR  
LESS TOXIC  
PRODUCTS****Potential Pollutant  
Source:**

Organic solvents, typically used for cleaning equipment and parts, are considered a significant pollutant in storm water. Exposure of these materials to storm water can be minimized by using less-toxic substitutes.

**Description of BMP:**

One method to reduce the impact of potential storm water pollutants is to substitute non-toxic or less-toxic materials. This includes using non-caustic detergents for parts cleaning, detergent or water-based degreasers in place of organic degreasers, replacing chlorinated solvents with non-chlorinated solvents, and using phosphate-free detergents. However, even non-toxic materials are considered storm water pollutants and must be managed properly.

**PERFORM  
REGULAR  
CLEANING -  
INCREASE  
FREQUENCY**



**Potential Pollutant  
Source:**

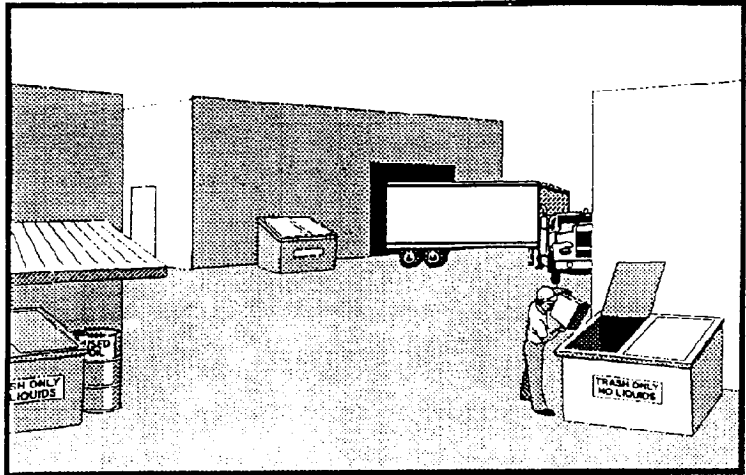
Dirt, surplus materials, and spilled or dropped materials are often allowed to accumulate in areas such as maintenance shops and storage areas. Pollutants from the accumulated material may be transported by storm water to the storm drain system. A clean and orderly work area reduces the possibility of accidental spills caused by mishandling of chemicals and equipment and should reduce safety hazards to personnel.

**Description of BMP:**

Maintaining a regular general sweeping and cleaning schedule reduces buildup of waste materials and minimizes the amount of significant materials exposed to storm water. General cleaning includes dusting and keeping work areas neat and organized.

Floors and ground surfaces will be kept dry using brooms, shovels, vacuum cleaners, or cleaning machines. Dry sweeping and dry cleaning will be performed instead of hosing down. Garbage and waste materials will be collected and disposed regularly. Particular emphasis will be placed on sweeping and cleaning outdoor areas. Granular absorbent materials used for spill cleanup will be promptly collected and properly disposed.

Cleanup and sweeping will be performed weekly and more often as necessary to remove all loose trash, sediment, oil, solvents, plastics and other significant materials. Additional cleanup and sweeping will be performed before the beginning of the fall rainy season. Additionally, a regular sweeping schedule will be maintained.

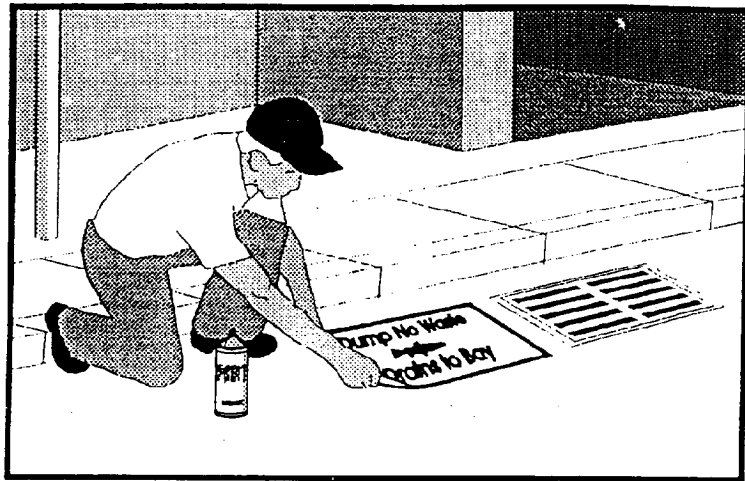
**PLACE TRASH  
RECEPTACLES IN  
APPROPRIATE  
LOCATIONS****Potential Pollutant  
Source:**

Improperly located or insufficient numbers of trash receptacles will promote poor housekeeping practices. This will increase the opportunity for pollutants from all source areas to reach storm water.

**Description of BMP:**

Proper placement and frequent emptying of trash receptacles will promote the proper disposal of waste materials. This reduces the opportunity for pollutants to reach storm water. Trash receptacles will be easily accessible for personnel.

**STENCIL "DUMP  
NO WASTE"  
SIGNS ON  
CATCH BASIN  
INLETS**



**Potential Pollutant  
Source:**

Storm water runoff and other materials entering the storm drain system are not transported to a sewage treatment facility; but instead are typically transported to nearby receiving waters (e.g., rivers, lakes, bays). Material illegally dumped into storm drain inlets (e.g., used oil, solvents, solid waste, etc.) can contribute to significant degradation of receiving waters.

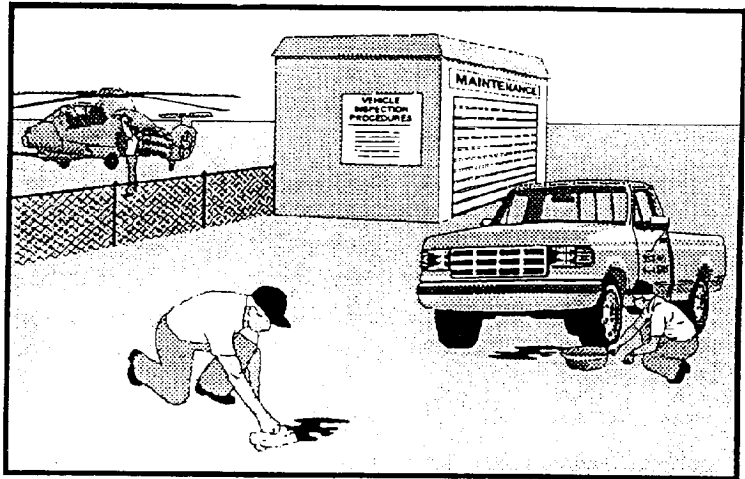
**Description of BMP:**

Clearly mark storm drain inlets to warn against illegal dumping.

**VEHICLE/EQUIPMENT  
MAINTENANCE  
BMPs**



**CHECK  
VEHICLES/  
EQUIPMENT FOR  
LEAKS AND  
PROMPTLY  
REPAIR**



**Potential Pollutant  
Source:**

Vehicles or equipment may leak a variety of fluids (fuel, oil, antifreeze, freon, etc.). These materials can be exposed to storm water.

**Description of BMP:**

All vehicles and equipment at the site, whether incoming, parked, stored, or salvaged, will be inspected weekly for oil and fluid leaks. Leaking vehicles will be repaired promptly.

## **DO NOT HOSE DOWN BUILDING FLOOR**

**Potential Pollutant Source:** Hosing down the vehicle maintenance building floor will transport pollutants (motor oil, fluids, etc.) to the storm drain.

**Description of BMP:** The vehicle maintenance building floor will not be hosed down; rather dry methods of cleaning will be used. Dry methods include sweeping or using damp rags or mops. If possible or practical, hoses will be removed from the building.

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**USE DRIP PANS, TARPS OR GROUND CLOTHS UNDER LEAKING  
VEHICLES/EQUIPMENT**

<b>Potential Pollutant Source:</b>	Vehicles or equipment may leak a variety of fluids (fuel, oil, antifreeze, freon, etc.). These materials can be exposed to storm water.
<b>Description of BMP:</b>	Drip pans, tarps, or groundcloths will be placed under leaking vehicles/equipment to collect fluids until leaks can be properly repaired. The drip pan will be routinely checked and the collected material disposed of properly.

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**REGULARLY SWEEP BUILDING FLOOR; DO NOT SWEEP DEBRIS OUTSIDE**

**Potential Pollutant Source:**

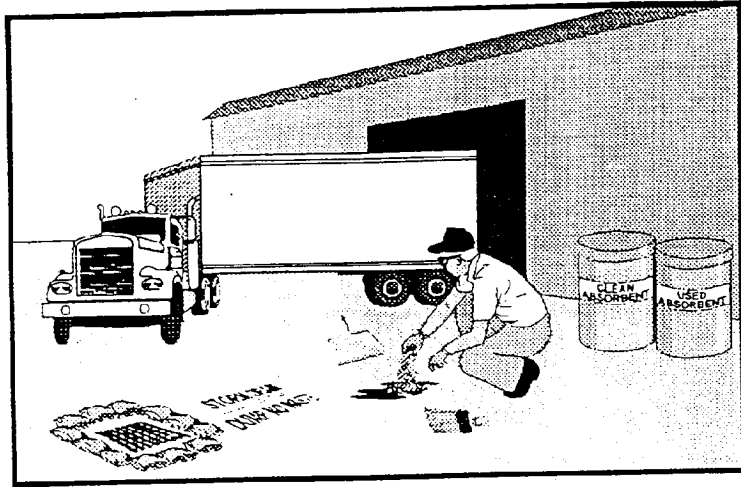
Dirt, surplus materials, and spilled or dropped materials can accumulate in the work areas of the maintenance building. Pollutants from the accumulated material can be transported to the storm drain system, if the material is swept outdoors.

**Description of BMP:**

Regular dry sweeping of the floors will prevent exposure of pollutants and debris to storm water. The debris will not be swept outside. Any absorbent materials used for spill cleanup will be removed and properly disposed of as soon as its use has been completed.

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## CONTROL SPILLS



**Potential Pollutant Source:**

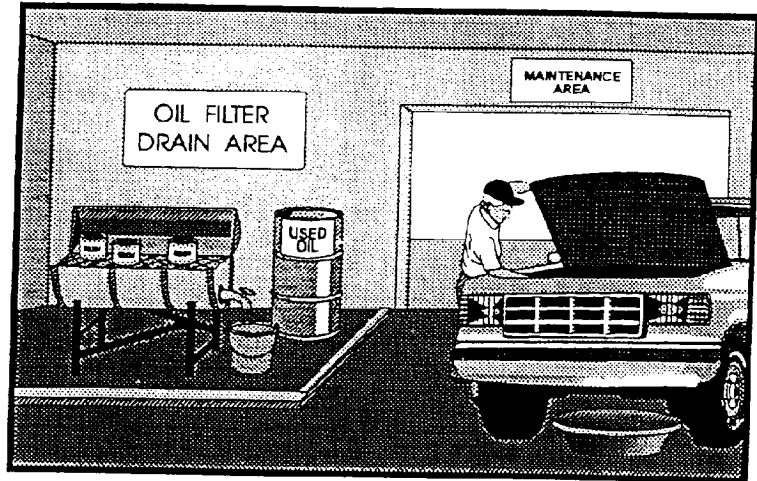
Spills of significant materials (motor oil, fluids, etc.) may be exposed to storm water and transported to storm drains and/or receiving water.

**Description of BMP:**

All spills will be controlled immediately to prevent pollutants from being transported to storm drains and/or receiving waters. Appropriate spill control material will be kept on site. Smaller spills will be contained using absorbent material such as kitty litter, straw, or sawdust. Absorbent material will be easily accessible and clearly marked, and containers for spent absorbent material will be readily available. Spent absorbent material will be managed appropriately and disposed of in accordance with applicable regulations. Large spills will be controlled using spill kits, booms, and other response equipment commensurate with the size of the spill. The methods outlined in the Facility's Spill Prevention and Response Plans for hazardous materials will be followed for spills of any potential storm water pollutants.

Personnel will be trained in spill prevention and response procedures including the use of personal protection equipment (such as gloves, eye and face protection), the use and proper cleanup and disposal of absorbent and equipment, and who to notify in the event of a spill.

**DESIGNATE A  
SPECIAL AREA  
FOR DRAINING  
OR REPLACING  
FLUIDS - AVOID  
OUTSIDE AREAS**



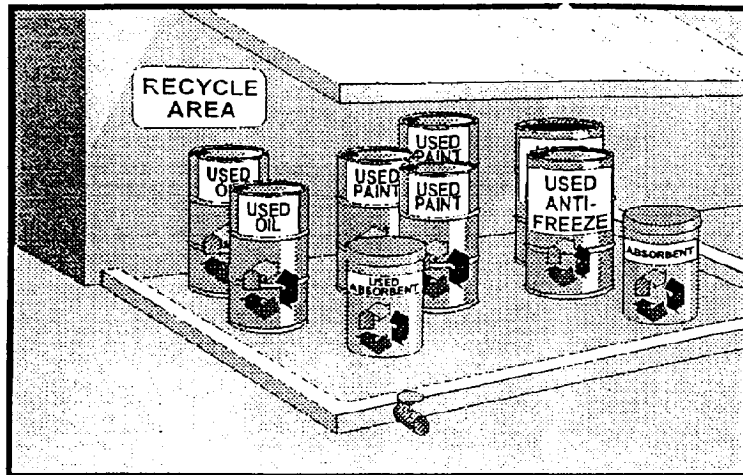
**Potential Pollutant  
Source:**

Draining and replacing motor oil, coolants, and other fluids in uncontrolled areas of the facility may result in accidental spillage and subsequent exposure of materials to storm water.

**Description of BMP:**

Motor oil, coolants, and other fluids will be drained and replaced at a designated area to reduce the potential for spills. Consideration will be given to placing these areas indoors or installing bermed concrete pads outdoors.

## RECYCLE USED OIL



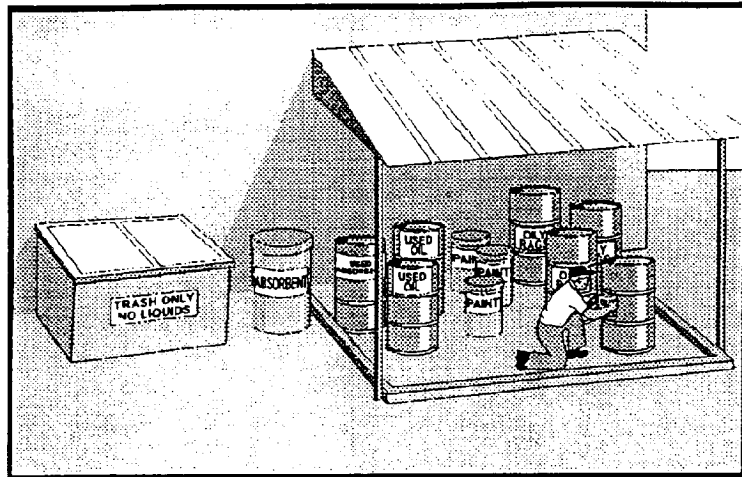
**Potential Pollutant Source:**

Used oil stored outdoors may be exposed to rainfall and storm water runoff.

**Description of BMP:**

Recycling will be employed to reduce the amount of waste material exposed to storm water. Personnel will be trained on proper recycling techniques and containers will be labelled with proper recycling information. Recycling collections will be conducted weekly or as appropriate.

**LABEL  
CONTAINERS  
USED FOR  
STORAGE OF  
SIGNIFICANT  
MATERIALS**



**Potential Pollutant  
Source:**

Unlabelled drums, cans and containers may be improperly disposed of and managed. Storm water quality will be affected if significant materials are discharged to the storm drain and/or receiving waters. Lack of labeling also hampers proper spill response.

**Description of BMP:**

All containers will be labeled as to container contents (e.g., used solvent, unleaded gas). In addition, containers of hazardous substances will be labeled regarding the potential hazard (e.g., corrosive, flammable). Personnel will be trained not to remove labels on containers.



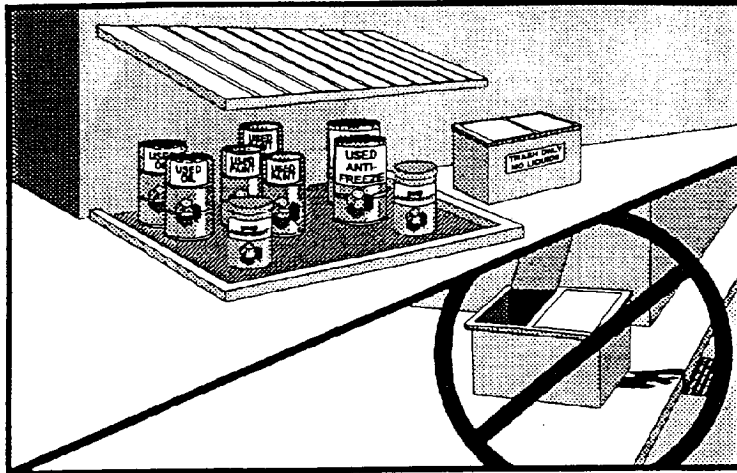
**CONSIDER CHANGING OIL DISPENSING EQUIPMENT/PROCEDURES  
IN FLUIDS BUILDING**

**Potential Pollutant Source:** Motor oil dispensing equipment and containers may drip and/or leak, especially during dispensing. Accumulated oil on the floor of the fluids building may seep out of the building and be exposed to storm water.

**Description of BMP:** Oil dispensing equipment and/or procedures will be evaluated in the fluids storage building. A different dispensing system and method to capture spills (drip pan) will be installed, if appropriate.

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## PROPERLY DISPOSE OF WASTES



### Potential Pollutant Source:

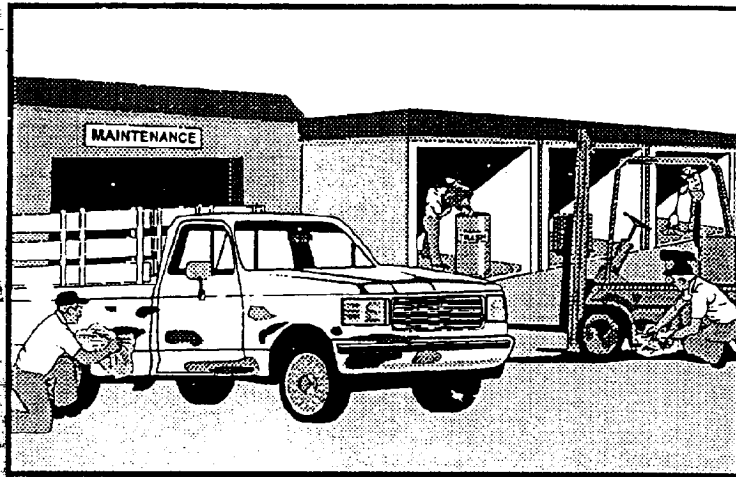
Wastes poured or deposited into storm drains contains pollutants which will enter the storm drain system and receiving waters without treatment. Waste oil and/or other liquid wastes stored outdoors with no cover and no secondary containment may also leak pollutants into the storm drain system.

### Description of BMP:

Employees will be trained on proper waste disposal and recycling procedures. Wastes should not be poured or deposited into storm drains or storm drain connections. Wastes should not be stored outdoors without cover and secondary containment.

**VEHICLE/EQUIPMENT  
PARKING  
BMPs**

**KEEP EQUIPMENT  
AND VEHICLES  
CLEAN**



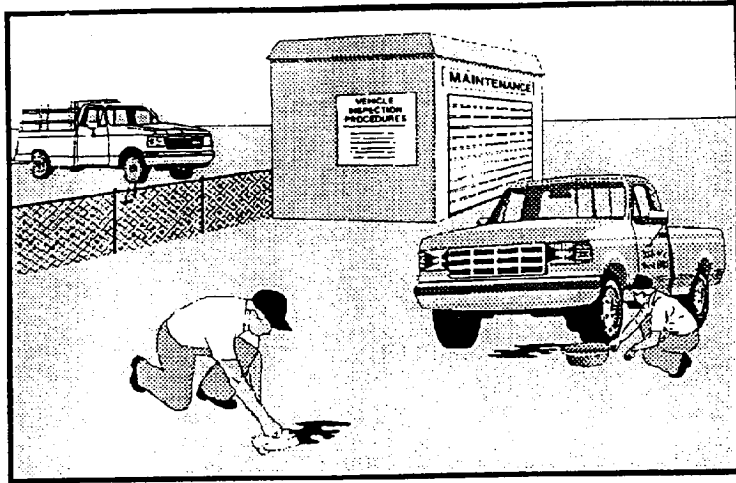
**Potential Pollutant  
Source:**

Accumulations of oil and grease on equipment and vehicles may be exposed to rainfall and transported by storm water to receiving waters.

**Description of BMP:**

Equipment and vehicles will be cleaned regularly using either dry or wet methods to reduce the amount of pollutants exposed to rainfall. Waste waters will not be discharged to the storm drain system without proper treatment.

**CHECK VEHICLES  
AND EQUIPMENT  
FOR LEAKS AND  
PROMPTLY  
REPAIR**



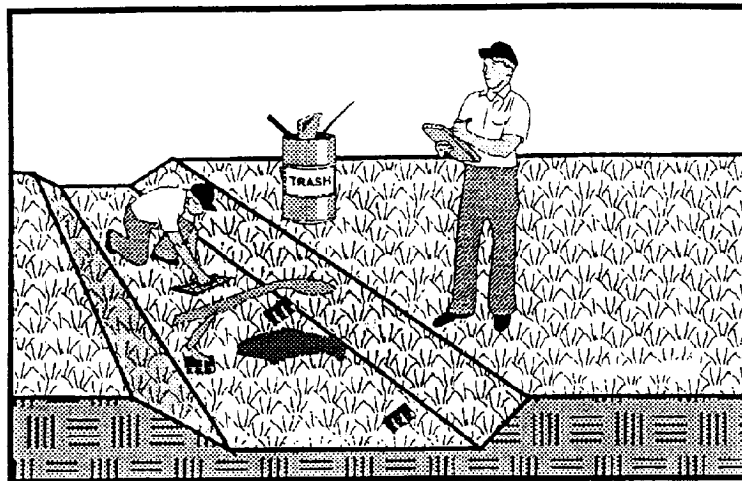
**Potential Pollutant  
Source:**

Leaking equipment may expose a variety of fluids (fuel, oil, antifreeze, freon, etc.) to storm water.

**Description of BMP:**

All vehicles and equipment at the site, whether incoming, parked, stored, or salvaged, will be inspected for oil and fluid leaks. If leaks are present, drip pans or absorbent material will be placed under the vehicle or equipment until the leak can be repaired.

**REGULARLY  
INSPECT AND  
MAINTAIN  
STORM WATER  
CONVEYANCE  
SYSTEMS**



**Potential Pollutant  
Source:**

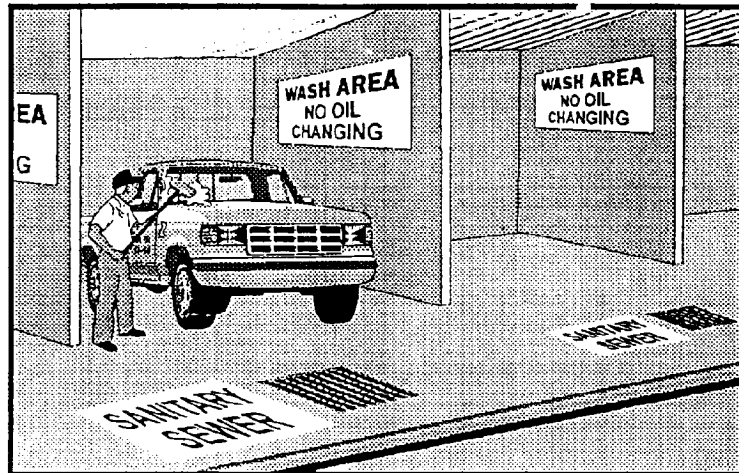
Over time, storm water conveyance systems may fill up with sediments and clog. Also, drainage swales may erode and become a source of sediment pollution to storm water.

**Description of BMP:**

Storm water conveyance systems will be inspected monthly and maintained as needed. This will include inspection of drainage swales and outfall pipes for evidence of erosion. Other storm water system components, such as oil/water separators, catch basins, and detention ponds, will also be inspected and maintained. The PPT will assign personnel responsible for inspections. Personnel will be provided a copy of a site plan showing the location of all storm water conveyance systems to be inspected. The storm water conveyance system inspection and maintenance form is found in Appendix E.

**VEHICLE EQUIPMENT  
WASHING  
BMPs**

# WASH VEHICLES/ EQUIPMENT IN DESIGNATED AREA



**Potential Pollutant Source:**

Wash water from vehicles and equipment often contains pollutants such as grease, oil, and gasoline, which may impair receiving waters.

**Description of BMP:**

A wash area will be designated to contain and control wash water. Signs will be posted in the designated wash area banning oil changes and other maintenance work.



## **EDUCATE EMPLOYEES ABOUT NEED TO CONTROL WASHING TO PREVENT STORM WATER CONTAMINATION**

<b>Potential Pollutant Source:</b>	Wash water from vehicles and equipment often contains pollutants such as grease, oil, and gasoline, which may impair receiving waters.
<b>Description of BMP:</b>	All appropriate BMPs (such as wash in designated area, do not use soaps, etc.) should be followed for vehicle and equipment washing. Employees will be trained about the need to control washing to prevent storm water contamination. Each of the washing BMPs presented in this section will be addressed in the stormwater training program.

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## REDUCE USE OF SOAPS AND DETERGENTS

**Potential Pollutant  
Source:**

Soaps and detergents are significant materials which must not be exposed to storm water or discharged to the storm drain system without prior treatment. These materials emulsify oil making oil/water separation treatment less effective.

**Description of BMP:**

To the extent practicable, vehicles and equipment will be washed with water only, avoiding the use of soaps and detergents. Wash waters without soaps or detergents, used to clean only the bodies of vehicles and equipment (not the undersides or engine areas) may be discharged to storm water without treatment or control. Use of soaps/detergents, or washing the undersides or engines of vehicles/equipment, requires treatment of the wash water prior to discharge.

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**CONSTRUCT BERM OR DIKE AROUND WASH AREA  
TO PREVENT STORM WATER RUNON**

**Potential Pollutant  
Source:**

Vehicle/equipment wash areas have a high likelihood to release storm water pollutants. Typical pollutants include oil, fuel and sediment.

**Description of BMP:**

A raised berm (asphalt "speed bump") will be constructed on the up-slope sides of the vehicle wash area. This will divert storm water from the wash area and reduce exposure to the pollutants typically associated with vehicle/equipment washing.

---

## PAVE BERMED AREA

**Potential Pollutant  
Source:**

Vehicle/equipment wash areas have a high likelihood for the release of pollutants such as oil, fuel, and sediments. Pollutants may infiltrate into the soil and/or be transported to storm drains by storm water.

**Description of BMP:**

The bermed area will be paved with portland cement concrete to prevent infiltration of pollutants.

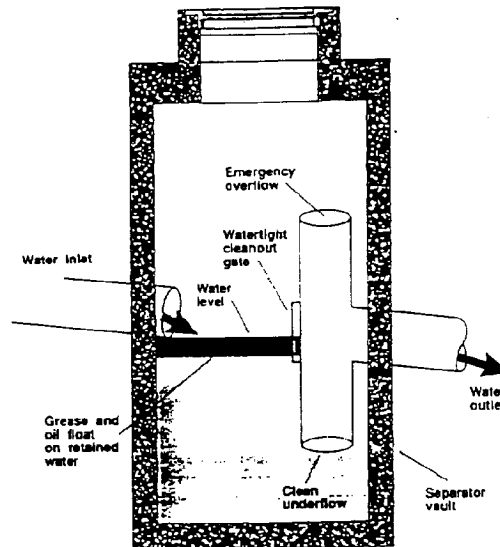
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## CONTROL FUEL SPILLS

<b>Potential Pollutant Source:</b>	Gasoline and oil spills (in fluids building) may be exposed to storm water and transported to storm drains and/or receiving waters.
<b>Description of BMP:</b>	Clean up materials will be stored in the fluids building. Materials will include a container for disposal of dry absorb material. Spills will be promptly cleaned up. Spill response procedures will be posted in the fluids building.

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## INSTALL OIL/ WATER SEPARATOR



### Potential Pollutant Source:

Oil/water separators are designed to remove petroleum compounds and grease from storm water. Separators will also remove floatable debris and settleable solids.

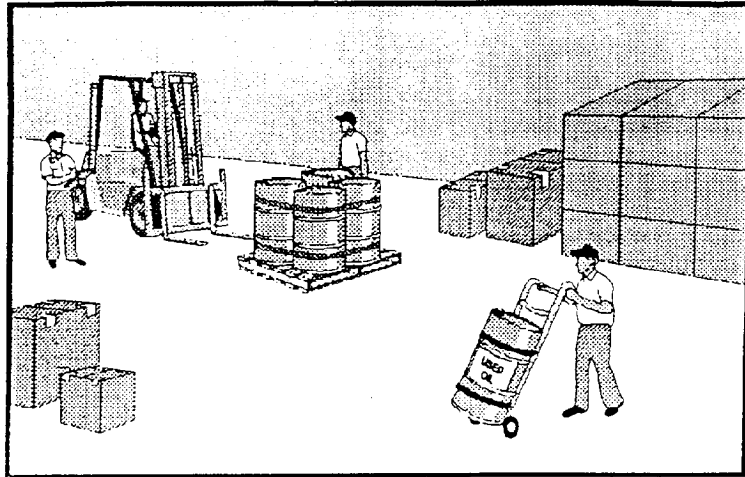
### Description of BMP:

Oil/water separators are underground vaults where storm water is piped in and out of the separator. Oil/water separators come in many configurations. King County employs the SC-Type Separators as described in the Stormwater Management Manual for the Puget Sound Basin, and shown in the accompanying schematic. To increase oil removal efficiency, King County employs two such separators in series which discharge to vegetated biofilters, or to the sanitary sewer when available. The degree and frequency of maintenance significantly affects the performance of an oil/water separator. Cleaning the oil/water separator will prevent the accumulated debris and oil from being discharged from the structure during intense storms.

Oil/water separators will be checked monthly during the wet season and will be cleaned at least four times a year. They will always be cleaned in September, before the start of the wet season.

**MAINTENANCE  
MATERIALS STORAGE  
BMPs**

**EMPLOY PROPER  
HANDLING  
PROCEDURES TO  
TRANSPORT  
MATERIALS AND  
WASTES**



**Potential Pollutant  
Source:**

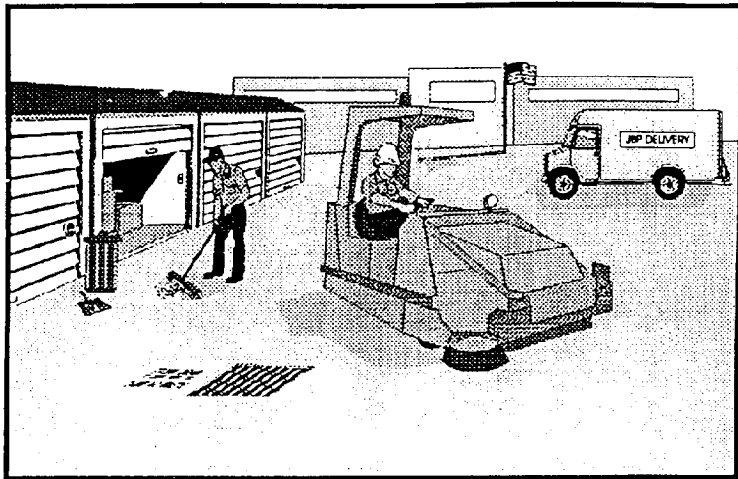
Materials and waste are usually transported using forklifts, trailers, trucks, etc. If these loads are not properly secured or are handled incorrectly, spills may occur. Spills may expose materials to storm water, which may transport pollutants to the storm drain system and/or receiving waters.

**Description of BMP:**

Drums will be moved by using a barrel cart or by placing the drum on a pallet and moving it with a forklift. At a minimum, two persons will assist the forklift operator when transferring a drum to or from a pallet. When multiple drums are stacked on a single pallet, the drums will be secured together with metallic strapping to reduce the potential for spillage due to weight shift. Mechanical puncture of drums with the tines of the forklift will be avoided.



**PERFORM  
WEEKLY  
PAVEMENT  
SWEEPING**



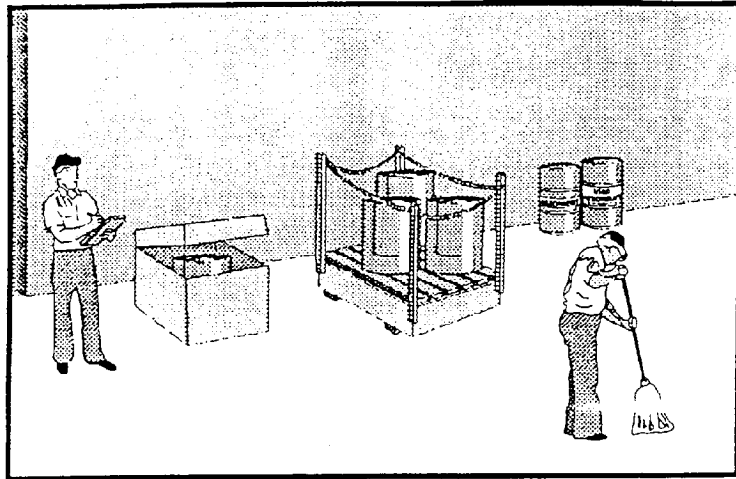
**Potential Pollutant  
Source:**

Trash, litter and particulate matter accumulate on paved surfaces. These materials are then transported during storm events into the storm drain system.

**Description of BMP:**

Regular dry sweeping of paved areas will prevent pollutants and debris from entering storm drains. Dry sweeping of paved areas will be performed weekly. Personnel will be trained to use a small vacuum sweeper, if available, instead of a mechanical brush sweeper since the vacuum is more effective in removing fine particulate matter.

**STORE 55-  
GALLON DRUMS  
IN OVERPACK  
CONTAINERS  
OR ON  
CONTAINMENT  
PALLETS**



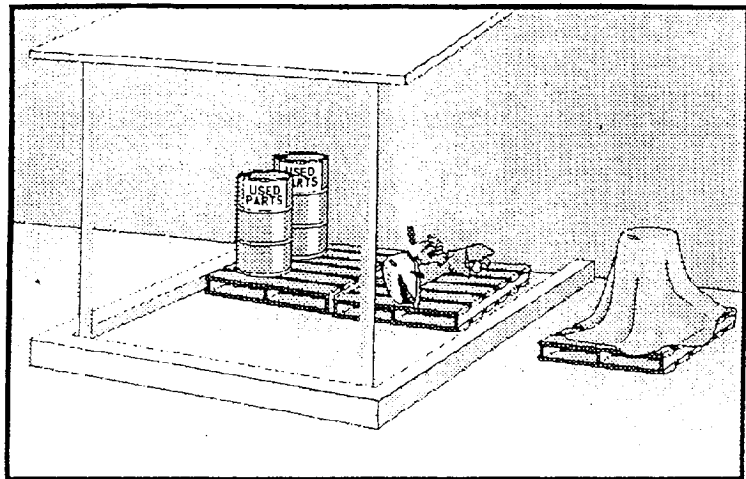
**Potential Pollutant  
Source:**

Chemicals, oils, solvents or liquid materials stored outside in 55-gallon drums may leak. Leaked materials may then be exposed to storm water and transported to the storm drain system and/or receiving waters.

**Description of BMP:**

Overpack containers and containment pallets are secondary containers usually constructed of plastic. They are large enough to hold the contents of the stored containers if they should break or leak. Using overpack containers or containment pallets prevents storm water pollution related to leaks. Overpack containers should be protected against damage from vehicles, and should not be stored where they are exposed to long-term ultra-violet light. No solvents capable of dissolving the overpack material should be stored in plastic overpack containers.

**DO NOT STORE  
USED PARTS OR  
SIGNIFICANT  
MATERIALS  
DIRECTLY ON  
THE GROUND**



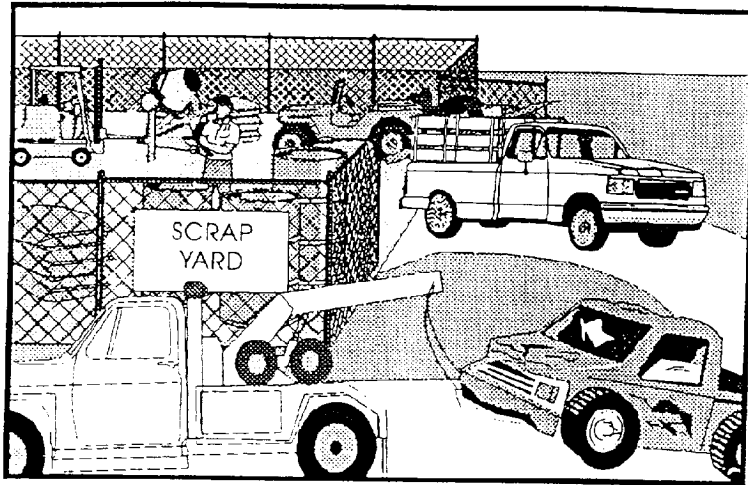
**Potential Pollutant  
Source:**

Used parts are often covered with oil, grease and other potential pollutants. Containers such as 55-gallon drums may develop leaks and spill potential pollutants onto the ground or pavement. If the used parts or containers are stored directly on the pavement or ground, significant materials can be exposed to storm water which may transport the pollutants into the storm drain system or receiving waters.

**Description of BMP:**

Used parts, significant materials and containers will not be stored directly on the pavement or the ground. If possible, used parts and containers will be stored indoors. If outdoor storage is necessary, smaller parts will be stored inside leak-proof, covered containers, such as labeled 55-gallon drums, and placed on wooden pallets. Larger parts will be placed on wooden pallets or waterproof tarpaulins and covered with waterproof tarpaulins. Containers will be placed on wooden pallets to prevent the bottoms from rusting and to facilitate spill and leak detection. Placing used parts and containers in roofed, bermed storage areas is also acceptable.

**SORT THROUGH  
AND DISPOSE OF  
OBSOLETE  
EQUIPMENT AND  
SURPLUS  
MATERIALS**



**Potential Pollutant  
Source:**

Obsolete equipment and surplus materials are often stored for many years and are subject to deterioration. Such equipment may leak or leach a variety of fluids or materials which may be exposed to storm water.

**Description of BMP:**

Obsolete equipment and surplus materials will be properly disposed of off-site to reduce the chances of pollutants reaching the storm drain system.

## **SWEEP UP AND PROPERLY DISPOSE OF DRY ABSORB**

<b>Potential Pollutant Source:</b>	Spent dry absorb may contain oil and gasoline or other fluids that, if the dry absorb is tracked outside, may be exposed to storm water.
<b>Description of BMP:</b>	The dry absorb will be collected and disposed of properly. In the future, spent dry absorb will not be allowed to remain on the floor or paved surfaces longer than necessary to perform its cleanup function.

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## **EDUCATE EMPLOYEES ABOUT NEED TO KEEP SIGNIFICANT MATERIALS IN COVERED OR CONTAINED AREAS**

<b>Potential Pollutant Source:</b>	Significant materials which are stored outside uncovered and uncontained are exposed to storm water, which may transport leaked or spilled material into the storm drain system.
<b>Description of BMP:</b>	All appropriate BMPs (such as storing significant materials under cover, and not storing significant materials directly on the ground, etc.) should be followed. All employees will be trained on the need to keep significant materials in covered or contained areas to prevent storm water contamination.

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**DEBRIS  
STORAGE  
BMPs**

## DESIGNATE SPECIAL AREA FOR STORAGE

<b>Potential Pollutant Source:</b>	Debris scattered throughout the site and exposed to storm water may decompose and leach pollutants.
<b>Description of BMP:</b>	Debris is temporarily stored in a designated area. The area will be signed as a temporary debris storage area. Items will be stored in trash receptacles when appropriate.

---



## PROPERLY DISPOSE OF WASTES

<b>Potential Pollutant Source:</b>	Waste materials not properly disposed of may generate a variety of pollutants which may enter the storm drain system and receiving waters.
<b>Description of BMP:</b>	Debris is taken to a transfer station on a regular basis. Items that can not be accepted at the transfer station are referred to Renton Headquarters for proper disposal. Waste clearance forms may need to be completed in some situations.

---

## RECYCLE

**Potential Pollutant  
Source:**

Many materials, both hazardous and non-hazardous, can be sources of storm water pollutants. Recycling is employed to reduce the amount of waste material exposed to storm water at the facility.

**Description of BMP:**

Recycling collections will be conducted at least weekly for recyclable items such as glass, aluminum, oil, scrap metals, and cardboard. Recyclable items should be separated to facilitate recycling. Personnel will be trained on proper recycling techniques.

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**SORT THROUGH AND DISPOSE OF  
UNUSED 55-GALLON DRUMS**

<b>Potential Pollutant Source:</b>	Unused 55-gallon drums may leach pollutants such as oil and other fluids.
<b>Description of BMP:</b>	Sort through and dispose of unused 55-gallon drums. The drums which will remain on site will be stored in a designated and signed area.

---

## **APPENDIX B – FORMS**

<b>Stormwater Discharge</b> <b>Wet Weather (October 1 - April 30)</b> <b>Assessment and Certification</b>	Completed by: _____
	Title: _____
	Date: _____

The wet season inspection shall 1) verify whether the description of potential pollutant sources and the site map are accurate; 2) make certain that the pollutant reduction controls are being implemented; and 3) observe whether floating materials, suspended solids, oil and grease, discoloration, turbidity, odor, etc. is occurring in the stormwater discharge.

	Comments	Required Actions
Check outfalls for floating materials, oil and grease, turbidity, odor, etc.		
Check accuracy of site drainage map		
Check accuracy of potential pollutant and BMP description		

Revisions to BMPs		
Revision No.	Page	Revision

<b>Certification</b>
Based on my inquiry of the person or persons who manage the systems or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

Name and Title \_\_\_\_\_ Phone \_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

**Non-Stormwater Discharge  
Dry Weather (May to September 30)  
Assessment & Certification**

**Worksheet #6**

**Completed by:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, non-contact cooling water, or process wastewater (including *leachate*) to the *stormwater drainage system*.

Tests may include: visual observations of flows, odors, and other abnormal conditions; dye tests, television line surveys; and/or analysis and validation of accurate piping schematics.

Date	Discharge Location (as indicated on the site map)	Method used to test or Evaluate Discharge	Describe Results from Test for Presence of Non-Stormwater Discharge	Identify Potential Significant Sources	Person who Conducted The Test

**CERTIFICATION**

*Based on my inquiry of the person or persons who manage the systems or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

**A. Name & Title**

**B. Phone:**

**C. Signature**

**D. Date Signed**

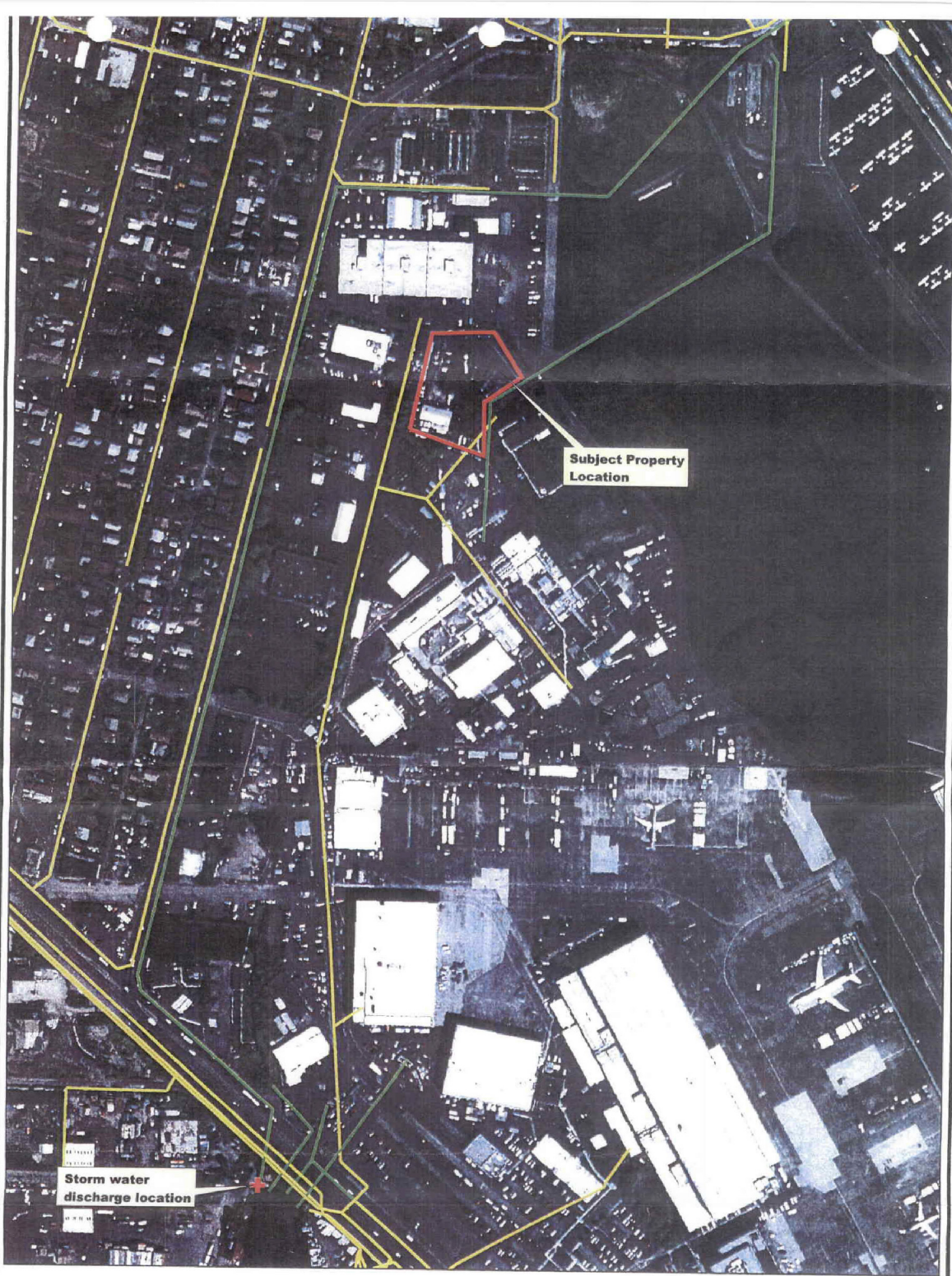
**Boeing Staging Facility  
Stormwater Training Log**

Date: \_\_\_\_\_

Instructor(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subject(s): \_\_\_\_\_  
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Trainees: \_\_\_\_\_  
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# King County Airport Staging Yard

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## Legend

Seattle Sewerlines  
 Storm Drainage  
 Separated Sewer

The information included on this map has been compiled by King County staff from a variety of sources and is subject to change without notice. King County makes no representation or warranty, express or implied, as to accuracy, completeness, timeliness, or use of the information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of this information or reliance on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.



King County



May 14, 2002

100 0 100 200 300 400 500 Feet



